Reg. No. :

Question Paper Code: 41834

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Third Semester

Information Technology

14UIT304- OBJECT ORIENTED PROGRAMMING

(Common to Computer Science and Engineering)

(Regulation 2014)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which feature in Object Oriented Programming allows reusing code?

     (a) Polymorphism   (b) Encapsulation
     (c) Inheritance   (d) Data hiding

2. The _____ principle helps the programmers to build secure programs.

     (a) Operator overloading   (b) Encapsulation
     (c) Data hiding   (d) Polymorphism

3. Which of the following gets called when an object goes out of scope?

     (a) Constructor   (b) Destructor
     (c) Main   (d) Virtual function

4. Which of the following cannot be friend?

     (a) Function   (b) Class
     (c) Object   (d) Operator function

5. Template support
     (a) Generic programming   (b) Object-oriented programming
     (c) Procedural programming   (d) Structured programming

6. Which of the following is the most general exception handler that catches exception of 'any type'?

      (a) catch(std::exception)   (b) catch(std::any_exception)

      (c) catch ( )   (d) catch(...)

7. The class that is not used to create object

      (a) Virtual base class   (b) Abstract class

      (c) Multiple inheritance   (d) Nesting of classes

8. Runtime polymorphism is achieved by

      (a) Function overloading   (b) Operator overloading

      (c) Friend function   (d) Virtual function

9. What is the use of Namespace?

      (a) To encapsulate the data   (b) To structure a program into logical units

      (c) Both a and b   (d) None of these

10. Which of the STL containers store the elements contiguously (in adjacent memory locations)?

      (a) std::vector   (b) std::list

      (c) std::map   (d) std::set

PART - B (5 x 2 = 10 Marks)

11. Differentiate Procedural programming and Object Oriented programming.

12. How does constructor differ from normal functions.?

13. Mention the tasks performed by exception handling.

14. Define pure virtual functions.

15. What are the manipulators available in C++?

PART - C (5 x 16 = 80 Marks)

16. (a) Explain the major principles of Object Oriented programming with illustrations and neat diagram. (16)

Or

  (b) Discuss in detail about const, volatile and static functions. (16)

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17. (a) Explain the different types of constructors that are available in C++ with suitable examples. (16)

Or

(b) Write a C++ program to overload '+' operator to add two objects of a class using friend function. (16)

18. (a) Describe the templates and its types. (16)

Or

(b) Explain briefly about the Exception handling mechanism with block diagram and write suitable example programs. (16)

19. (a) Explain in detail about inheritance with example programs. (16)

Or

(b) Explain Runtime polymorphism with suitable examples. (16)

20. (a) Explain the features of Formatted console I/O system supported in C++. (16)

Or

(b) Explain the components of standard template library in detail. (16)

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